

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	"63554113":pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 12:11
L3	12	((cross adj feed\$4) or (cross adj fed)) same auxotro\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 15:37
L4	174	((ion adj channel) or lipid or membrane) same auxotro\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 15:39
L5	3	3 and 4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 15:38
L6	80	((ion adj channel) or lipid) same auxotro\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 15:39
L7	1	3 and 6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 15:39
S2	2	"6355413":pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/06/01 15:33
S3	2	gage-peter-william.in.	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:52
S4	1	cox-graeme-barry.in.	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:52
S5	2	ewart-gary-dinneen.in.	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:52
S6	166	ewart.in.	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:52
S7	365	gage.in.	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:52
S8	4418	cox.in.	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:53
S9	7	(ion adj channel) and (S6 or S7 or S8)	EPO; JPO; DERWENT	OR	ON	2005/05/25 12:54
S10	7	(ion adj channel) and (S6 or S7 or S8)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 12:54

S11	1364	heterologous with ((ion adj channel) or transmembrane or channel or (lipid adj bilayer))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 12:56
S12	1118	activity and screen\$4 and (ion same movement)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 12:57
S13	145	S11 and S12	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 12:57
S14	145	S11 and S12	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:17
S15	1	S14 and vpu	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:19
S16	18	S14 and HIv	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:26
S17	71345	proline or adenine	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:27
S18	49	S14 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:34
S19	0	"5846757".in. and S18	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:28
S20	0	"5670113":pn. and S18	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:28

S21	1	"5846757".pn. and S18	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:29
S22	251	S12 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:29
S23	404	S11 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:29
S24	145	vpu and (ion adj channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:34
S25	10	vpu same (ion adj channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 13:35
S26	1364	heterologous with ((ion adj channel) or transmembrane or channel or (lipid adj bilayer))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 14:03
S27	1118	activity and screen\$4 and (ion same movement)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 14:03
S28	145	S26 and S27	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/25 14:03
S29	2	S28 and ((cross adj feeding with cells) or auxotrophic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/25 14:05
S30	2	S28 and auxotrophic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/25 14:04

S31	158	S26 and ((cross adj feeding with cells) or auxotrophic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/25 14:09
S32	20	S27 and ((cross adj feeding with cells) or auxotrophic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/25 14:05
S33	156	S31 not S32	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/25 14:12
S34	0	S31 not auxotrophic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/25 14:13

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 12:56:33 ON 01 JUN 2005

L1 127 S AUXOTRO? CELL?

L2 84194 S ION CHANNEL?

L3 0 S L1 AND L2

L4 615584 S METABOLITE OR PROLINE OR ADENINE

L5 20 S L1 AND L4

L6 13 DUP REM L5 (7 DUPLICATES REMOVED)

L7 12 S L6 AND PY<1996

L8 327002 S PERMEA?

L9 2918351 S ION CHANNEL OR LIPID OR MEMBRANE

L10 95256 S HETEROLOGOUS

L11 13909 S L9 AND L10

L12 223779 S PROLINE OR ADENINE

L13 186 S L11 AND L12

L14 9 S L13 AND L8

L15 5 DUP REM L14 (4 DUPLICATES REMOVED)

L16 381 S CROSS(W) FEED?

L17 24 S L4 AND L16

L18 15 DUP REM L17 (9 DUPLICATES REMOVED)

L19 13070 S AUXOTRO?

L20 2 S L18 AND L19

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NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks
(ROSPATENT) added to list of core patent offices covered
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status
data from INPADOC
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 10 MAR 22 KOREPAT now updated monthly; patent information enhanced
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS 12 MAR 22 PATDPASPC - New patent database available
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS 14 APR 04 EPFULL enhanced with additional patent information and new
fields
NEWS 15 APR 04 EMBASE - Database reloaded and enhanced
NEWS 16 APR 18 New CAS Information Use Policies available online
NEWS 17 APR 25 Patent searching, including current-awareness alerts (SDIs),
based on application date in CA/CAPLUS and USPATFULL/USPAT2
may be affected by a change in filing date for U.S.
applications.
NEWS 18 APR 28 Improved searching of U.S. Patent Classifications for
U.S. patent records in CA/CAPLUS
NEWS 19 MAY 23 GBFULL enhanced with patent drawing images
NEWS 20 MAY 23 REGISTRY has been enhanced with source information from
CHEMCATS
NEWS 21 MAY 26 STN User Update to be held June 6 and June 7 at the SLA 2005
Annual Conference

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

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FILE 'HOME' ENTERED AT 07:21:40 ON 01 JUN 2005

=> file caplus biosis

COST IN U.S. DOLLARS

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TOTAL

SESSION

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FILE 'CAPLUS' ENTERED AT 07:22:05 ON 01 JUN 2005

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FILE 'BIOSIS' ENTERED AT 07:22:05 ON 01 JUN 2005

Copyright (c) 2005 The Thomson Corporation

=> reovirus

L1 5565 REOVIRUS

=> oncolytic or oncolysis

L2 1911 ONCOLYTIC OR ONCOLYSIS

=> L1 and L2

L3 75 L1 AND L2

=> irradiation and L3

L4 1 IRRADIATION AND L3

=> radiation and L3

L5 5 RADIATION AND L3

=> isotope and L5

L6 0 ISOTOPE AND L5

=> D L5 IBIB ABS 1-5

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:648343 CAPLUS

DOCUMENT NUMBER: 141:151038

TITLE: Therapy for primary and metastatic cancers

INVENTOR(S): Hu, Fang; Wu, Bo

PATENT ASSIGNEE(S): Shanghai Sunway Biotech Co., Ltd., Peop. Rep. China

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2004066947 | A2 | 20040812 | WO 2004-US2330 | 20040128 |
| WO 2004066947 | A3 | 20050407 | | |
| W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG,
BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR,
CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES,
ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,
IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC,
LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX,
MZ, MZ, NA, NI | | | | |
| US 2004202663 | A1 | 20041014 | US 2004-766307 | 20040128 |

PRIORITY APPN. INFO.: US 2003-443095P P 20030128

AB The present invention relates to compns. and methods for ablating tumor cells in a subject having at least one tumor site. More specifically, the method comprises contacting the tumor cells in at least one tumor with a lytic agent in vivo, under lytic conditions, forming a treated tumor; and applying a sufficient in vivo stimulus to the treated tumor forming a stimulated tumor. Compns. and methods are included for shrinking a local tumor or a distal metastatic tumor, or both in a subject. In a preferred

embodiment, the method for shrinking a tumor in a subject comprises: contacting a stimulated tumor cells in vivo with a lytic agent. The stimulus directed toward the tumor cells is capable of increasing the level of chaperone proteins in the tumor cells. The combination of lytic agents and tumor cell stimulus leads to shrinkage of the tumors that were treated directly, wherein the stimulus is either applied simultaneously or sequentially. Moreover, distal or metastatic tumors that were not-treated directly are also decreased by introducing a lytic agents into a stimulated tumor cells in a first-tumor ('the treated tumor' or 'the local tumor'). The preferred method steps that include introduction of a lytic agent and stimulation of the tumor cells is repeated in order to maximize the tumor shrinkage effects. The invention describes that the lytic agent comprises either an **oncolytic** virus e.g. an adenovirus, a herpes simplex virus, a **reovirus**, a Newcastle disease virus, a polio virus, a measles virus, or a vesicular stomatitis virus, or an **oncolytic** bacterium: *Salmonella*, *Bifidobacterium*, *Shigella*, *Listeria*, *Yersinia*, or *Clostridium*, or an any type of **oncolytic** agent. Addnl., the lytic agent may comprise a therapeutic genes: an apoptotic gene, a tumor necrosis factor gene, cytolytic gene, neg. I- $\kappa\beta$, caspase, γ globulin, α -antitrypsin, or Ela of adenovirus. The step of stimulating the first-tumor was contemplated include: local hypothermia, systemic hyperthermia, a high-frequency electromagnetic pulses, radiofrequency diathermy, ultrasound diathermy, an anoxia, a **radiation**, an alc., a glutamine, an infection, or any type of stimulus.

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:913021 CAPLUS
 DOCUMENT NUMBER: 139:377326
 TITLE: Sensitization of neoplastic cells to **radiation** therapy with **oncolytic** viruses
 INVENTOR(S): Morris, Donald; Coffey, Matthew C.; Thompson, Bradley G.; Ball, Douglas
 PATENT ASSIGNEE(S): Oncolectics Biotech Inc., Can.
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-----------------|-----------------|----------|
| WO 2003094939 | A1 | 20031120 | WO 2003-CA695 | 20030508 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2482826 | AA | 20031120 | CA 2003-2482826 | 20030508 |
| US 2004091463 | A1 | 20040513 | US 2003-431579 | 20030508 |
| EP 1505993 | A1 | 20050216 | EP 2003-724713 | 20030508 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003011448 | A | 20050315 | BR 2003-11448 | 20030508 |
| PRIORITY APPLN. INFO.: | | | | |
| | | US 2002-378948P | P | 20020510 |
| | | US 2003-443189P | P | 20030129 |
| | | WO 2003-CA695 | W | 20030508 |

AB The present invention relates to methods of sensitizing neoplastic cells to irradiation by using **oncolytic** viruses, particularly **reoviruses**. Also provided are methods of treating or ameliorating a tumor with a combination of **oncolytic** viruses and radiotherapy. An example is provided of an effective treatment of

nasopharyngeal cancer with radiotherapy and injection of Dearing strain reovirus at the lesion site.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:913020 CAPLUS
DOCUMENT NUMBER: 139:375000
TITLE: Method for reducing pain using **oncolytic** viruses
INVENTOR(S): Morris, Donald; Coffey, Matthew C.; Thompson, Bradley G.
PATENT ASSIGNEE(S): OncoLytics Biotech Inc., Can.
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2003094938 | A1 | 20031120 | WO 2003-CA674 | 20030507 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2484398 | AA | 20031120 | CA 2003-2484398 | 20030507 |
| EP 1505992 | A1 | 20050216 | EP 2003-722131 | 20030507 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003009825 | A | 20050301 | BR 2003-9825 | 20030507 |
| US 2004091458 | A1 | 20040513 | US 2003-431580 | 20030508 |
| PRIORITY APPLN. INFO.: | | | US 2002-378675P | P 20020509 |
| | | | US 2003-443177P | P 20030129 |
| | | | WO 2003-CA674 | W 20030507 |

AB The invention provides a method for reducing pain associated with neoplasms in a mammal, comprising administering an effective amount of one or more **oncolytic** viruses. Preferably, the mammal also receives an analgesic, and the amount of analgesic required by the mammal is reduced when the **oncolytic** virus is administered. The **oncolytic** virus is preferably **reovirus**. The mammal may be addnl. subject to chemotherapy, immunotherapy, hormonal and/or radiation therapy. For example, a patient suffering from malignant melanoma and being permanently on narcotics received three intratumoral injections of 109 pfu of the Dearing strain of **reovirus** serotype 3. One week following injection, the patient reported diminished pain at the treatment site and was taken off narcotics. There was no pain at the treatment site during a 8-10 wk period after injection and no significant side effects.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:52085 CAPLUS
DOCUMENT NUMBER: 132:193045
TITLE: **Oncolytic** viruses as novel anticancer agents: turning one scourge against another
AUTHOR(S): Smith, Edward R.; Chiocca, E. Antonio
CORPORATE SOURCE: Molecular Neuro-oncology Laboratories, Neurosurgery Service, Massachusetts General Hospital, CNY6, Charlestown, MA, 02119, USA
SOURCE: Expert Opinion on Investigational Drugs (2000), 9(2),

AB A review with 140 refs. Although the use of viruses as **oncolytic** agents is an historic concept, the use of genetically modified viruses to selectively target tumor cells is relatively novel and recent. The ability of viruses to efficiently infect and lyse cells, combined with the potential augmentation of this effect by progeny viruses throughout the tumor provide justification for exploitation of these agents in cancer therapy. Before application to humans, though, issues related to tumor cell selectivity, lack of toxicity to normal tissues and the effect of the antiviral immune response, will have to be clarified. The more commonly used **oncolytic** viruses are based on mutant strains of herpes simplex virus, adenovirus and **reovirus**. The tumor selectivity of each of these strains is discussed, particularly the complementation of the viral defect by cellular pathways involved in tumorigenesis. The combination of **oncolytic** viruses with **radiation**, chemotherapy and gene therapy is also reviewed. Further study of the interaction of viral proteins with cellular pathways involved in cell cycle control will provide the rationale for viral mutants with increased selectivity for tumor cells.

REFERENCE COUNT: 140 THERE ARE 140 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:128450 BIOSIS

DOCUMENT NUMBER: PREV200300128450

TITLE: **Oncolytic** viruses for the therapy of brain tumors and other solid malignancies: a review.

AUTHOR(S): Fulci, Giulia [Reprint Author]; Chiocca, Ennio Antonio

CORPORATE SOURCE: Molecular Neuro-Oncology Laboratories, Massachusetts General Hospital, 13th Street, East Building, CNY6, Charlestown, MA, 02129, USA

SOURCE: qfulci@partners.org; chiocca@helix.mgh.harvard.edu
Frontiers in Bioscience, (May 1 2003) Vol. 8, No. Cited January 31, 2003, pp. e346-e360.
<http://www.bioscience.org/>. online.

ISSN: 1093-4715 (ISSN online).
DOCUMENT TYPE: Article
General Review; (Literature Review)

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Mar 2003

Last Updated on STN: 5 Mar 2003

AB In spite of significant advances in the understanding of molecular processes in tumor biology that have led to the development of oncologic therapeutic strategies, the prognosis for several types of tumors (such as brain, pancreas, or hepatic malignancies) remains dismal. Without question, a strong need exists for continued investigations in new agents and new therapeutic regimens. The realization that several genes used by viruses in their lytic life cycle interact and/or complement the function of genes employed by cells in cellular events linked to cell cycle progression, apoptosis, and/or metabolism immediately suggests the development of treatment strategies wherein viral mutants could be employed as selective anticancer agents. Such viruses (designated as **oncolytic** viruses) can selectively grow in tumor cells, produce viral progeny in those cells, lyse them and release this progeny that can then infect additional cells in the tumor mass. A theoretical advantage of **oncolytic** viruses (OV) is that their numbers should augment within the tumor mass, a property that is lacking with drugs or **radiation** treatments. Additionally, OVs' mode of tumor killing differs from standard anticancer agents, providing the possibility for synergistic interactions in multimodal tumor therapies. In this review, we will describe the development of OVs and briefly review the life cycle of their wild-type (wt) counterparts. We will also summarize published results from OV clinical trials and attempt to provide a perspective on

research in this area.

=> D L4 IBIB ABS

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:913021 CAPLUS
DOCUMENT NUMBER: 139:377326
TITLE: Sensitization of neoplastic cells to radiation therapy
with **oncolytic** viruses
INVENTOR(S): Morris, Donald; Coffey, Matthew C.; Thompson, Bradley
G.; Ball, Douglas
PATENT ASSIGNEE(S): Oncolytics Biotech Inc., Can.
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2003094939 | A1 | 20031120 | WO 2003-CA695 | 20030508 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
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KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2482826 | AA | 20031120 | CA 2003-2482826 | 20030508 |
| US 2004091463 | A1 | 20040513 | US 2003-431579 | 20030508 |
| EP 1505993 | A1 | 20050216 | EP 2003-724713 | 20030508 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003011448 | A | 20050315 | BR 2003-11448 | 20030508 |
| PRIORITY APPLN. INFO.: | | | US 2002-378948P | P 20020510 |
| | | | US 2003-443189P | P 20030129 |
| | | | WO 2003-CA695 | W 20030508 |

AB The present invention relates to methods of sensitizing neoplastic cells to **irradn.** by using **oncolytic** viruses, particularly **reoviruses**. Also provided are methods of treating or ameliorating a tumor with a combination of **oncolytic** viruses and radiotherapy. An example is provided of an effective treatment of nasopharyngeal cancer with radiotherapy and injection of Dearing strain **reovirus** at the lesion site.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN . .
ACCESSION NUMBER: 2000:52085 CAPLUS
DOCUMENT NUMBER: 132:193045
TITLE: Oncolytic viruses as novel anticancer agents: turning one scourge against another
AUTHOR(S): Smith, Edward R.; Chiocca, E. Antonio
CORPORATE SOURCE: Molecular Neuro-oncology Laboratories, Neurosurgery Service, Massachusetts General Hospital, CNY6, Charlestown, MA, 02119, USA
SOURCE: Expert Opinion on Investigational Drugs (2000), 9(2), 311-327

PUBLISHER: Ashley Publications
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review with 140 refs. Although the use of viruses as **oncolytic** agents is an historic concept, the use of genetically modified viruses to selectively target tumor cells is relatively novel and recent. The ability of viruses to efficiently infect and lyse cells, combined with the potential augmentation of this effect by progeny viruses throughout the tumor provide justification for exploitation of these agents in cancer therapy. Before application to humans, though, issues related to tumor cell selectivity, lack of toxicity to normal tissues and the effect of the antiviral immune response, will have to be clarified. The more commonly used **oncolytic** viruses are based on mutant strains of herpes simplex virus, adenovirus and **reovirus**. The tumor selectivity of each of these strains is discussed, particularly the complementation of the viral defect by cellular pathways involved in tumorigenesis. The combination of **oncolytic** viruses with **radiation**, chemotherapy and gene therapy is also reviewed. Further study of the interaction of viral proteins with cellular pathways involved in cell cycle control will provide the rationale for viral mutants with increased selectivity for tumor cells.

REFERENCE COUNT: 140 THERE ARE 140 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT